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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/018,018	04/22/2002	Karen Briley-Saebo	NIDN-10427	3572

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AMERSHAM HEALTH
IP DEPARTMENT
101 CARNEGIE CENTER
PRINCETON, NJ 08540-6231

EXAMINER

SMITH, RUTH S

ART UNIT PAPER NUMBER

3737

DATE MAILED: 12/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/018,018

Applicant(s)

BRILEY-SAEBO ET AL.

Examiner

Ruth S Smith

Art Unit

3737

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 April 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Claim Objections

Claims 1-11,13 are objected to because of the following informalities: In claim 1, the use of "e.g. mammalian, avian, or reptilian" renders the claim indefinite. Appropriate correction is required.

Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It appears that claim 12 different types of methods (use of an agent, manufacture of an agent, method of surgery) and therefore, it is unclear as to what category of statutory invention the claim is directed to.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6,10-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Dumoulin et al. The claims are directly readable on Dumoulin et al which disclose a catheter inserted into the vasculature of a human body and an MR image of at least a part of the body containing the catheter (the vessel surrounding the catheter) is generated. An MR contrast agent is injected into the body through the catheter thereby to facilitate visualization at least part of the body containing the catheter and visualization of the catheter through which it is injected. The polarized MR magnetic susceptibility contrast agent is inherently a blood pool contrast agent. The catheter is not marked with a magnetic susceptibility agent. With regard to claim 3, Dumoulin et al disclose (in column 4) that the contrast agent has a T₁ value chosen to provide a contrast between the catheter and the blood. With regard to claim 4, Dumoulin et al disclose various contrast agents that are either inherently diamagnetic or paramagnetic.

Furthermore, with regard to claims 5,6, the contrast agents used by Dumoulin et al inherently enhances the T_1 or T_2^* relaxation properties of blood relative to the catheter.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7-9,13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dumoulin et al in view of Li et al or Ranney. Dumoulin et al disclose a catheter inserted into the vasculature of a human body and an MR image of at least a part of the body containing the catheter (the vessel surrounding the catheter) is generated. An MR contrast agent is injected into the body through the catheter thereby to facilitate visualization at least part of the body containing the catheter and visualization of the catheter through which it is injected. The polarized MR magnetic susceptibility contrast agent is inherently a blood pool contrast agent. Dumoulin et al disclose (in column 4) that the contrast agent has a T_1 value chosen to provide a contrast between the catheter and the blood. It is well known in the art that in addition to using T_1 enhancing agents, one can use a T_2^* enhancing agent as seen for example in Li et al and Ranney. Furthermore, it is well known in the art that such contrast agents are constituted by iron oxide or superparamagnetic iron-oxide particles having on their surfaces degraded starch. The use of a T_2^* enhancing agent inherently involves the use of a T_2^* -weighted MRI sequence in order for its effects to be visualized. Therefore, it would have been obvious to one skilled in the art to have modified Dumoulin et al such that the contrast agent is a T_2^* enhancing agent and the MRI sequence used is a T_2^* - weighted MRI sequence. Such a modification merely involves the substitution of one well known type of contrast enhancing agent for another. With regard to claim 13, the contrast agent used inherently has the property of inhibiting opsonization.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruth S Smith whose telephone number is (703) 308-3063. The examiner can normally be reached on M-F 5:30 AM- 2:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dennis Ruhl can be reached on (703) 308-2262. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3590.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.

A handwritten signature in black ink, appearing to read 'Ruth S Smith', with a stylized, cursive script.

Ruth S Smith
Primary Examiner
Art Unit 3737

RSS